

WHAT IS CLAIMED IS:

1. A data playback apparatus which plays back digital data having a first data part which includes attribute information of the digital data, and a second data part which is subsequent to the first data part and in which compressively coded audio and video data are multiplexed, while receiving the digital data,

said apparatus comprising:

a receiver for receiving the digital data;

a buffer for containing the received digital data;

an analyzer for receiving the first data part in the stored digital data and analyzing the first data part;

a decoder for receiving the second data part in the stored digital data and decoding the compressively coded audio and video data with separating the data; and

a display for displaying the data decoded by the decoder, wherein

the analyzer has a function of detecting a data structure element having a predefined value from the first data part, and instructs the receiver to stop its operation when the data structure element is not detected.

2. The data playback apparatus of Claim 1 wherein

when the data structure element is not detected, the analyzer instructs the display to display a message which

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which are included in the data structure element (hereinafter referred to as a first version number) with a version number which is previously set in the data playback apparatus (hereinafter referred to as a second version number), and instructs the display to display inquire information which inquires of a user of the data playback apparatus whether playback of the digital data is to be tried, when the first version number is larger than the second version number.

6. A data playback apparatus which plays back digital data having a first data part which includes attribute information of the digital data, and a second data part which is subsequent to the first data part and in which compressively coded audio and video data are multiplexed, while receiving the digital data,

said apparatus comprising:

a receiver for receiving the digital data;

a buffer for containing the received digital data;

an analyzer for receiving the first data part in the stored digital data and analyzing the first data part;

a decoder for receiving the second data part in the stored digital data and decoding the compressively coded audio and video data with separating the data; and

a display for displaying the data decoded by the

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decoder, wherein

the analyzer detects a data structure element having a predefined value from the first data part, and changes an operation mode of one of the receiver, the buffer, the decoder and the display, in accordance with information indicated by the data structure element.

7. A data playback method by which digital data having a first data part which includes attribute information of the digital data, and a second data part which is subsequent to the first data part and in which compressively coded audio and video data are multiplexed are played back while being received,

said method comprising:

a first step of receiving the digital data;

a second step of receiving the first data part in the received digital data and judging whether a data structure element having a predefined value is in the first data part;

a third step of receiving the second data part in the received digital data and decoding the compressively coded audio and video data with separating the data, only when the data structure element is detected in the second step; and

a fourth step of displaying the decoded audio or video data.

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8. A storage medium containing a software program which makes a computer execute the data playback method of Claim 7.

9. The data playback apparatus of Claim 1 wherein the data structure element having the predefined value is positioned as a second data structure element in the first data part.

10. A data structure having:

a first data part which includes attribute information of the data structure; and

a second data part which is subsequent to the first data part and in which compressively coded audio and video data are multiplexed, wherein

the first data part includes playback suitability information which indicates to a data playback apparatus having restrictions on data playable targets under functional constraints that the data structure is suitable for playback by the data playback apparatus.

11. The data structure of Claim 10 wherein

the first data part is composed of first to N-th (N is an integer which is equal to 2 or larger) data structure

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elements, and

a second data structure element among the first to N-th data structure elements indicates the playback suitability information.

12. The data structure of Claim 11 wherein

the second data structure element is positioned at a head of the first data part or in the vicinity of the head.

13. The data structure of Claim 12 wherein

the first to N-th data structure elements each have identification number information indicating one of the first to N-th data structure elements.

14. The data structure of Claim 11 wherein

the data structure element has version information indicating a version of a data structure which includes the data structure element.

15. The data structure of Claim 11 wherein

the data structure element has extended data indicating handling information which indicates various kinds of handling for the data structure.

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